

IN THE CLAIMS

Amend the claims as follows:

a³ 5. (Amended) An isolated DNA molecule encoding a peptide consisting of the amino acid sequence of SEQ ID NO.: 2 or SEQ ID NO.: 4.

~~Cancel Claims 16-25 and insert therefore the following new claims:~~

26. (New) An isolated peptide having SEQ ID NO.: 2 or a homologous peptide, wherein said homologous peptide induces SHC phosphorylation or induces the SHC/MAPK pathway.

27. (New) The peptide of Claim 26, having SEQ ID NO.: 2.

28. (New) The peptide of Claim 26, wherein said homologous peptide contains one or more conservative mutation.

29. (New) The peptide of Claim 28, wherein said conservative mutation is a replacement of one or more non-polar R-groups by other non-polar R groups.

a⁴ 30. (New) The peptide of Claim 28, wherein said conservative mutation is a replacement of one or more uncharged polar R groups by other uncharged polar R groups.

31. (New) The peptide of Claim 28, wherein said conservative mutation is a replacement of one or more charged polar R groups by other charged polar R groups .

32. (New) The peptide of Claim 28, wherein Lys is substituted for Arg.

33. (New) The peptide of Claim 28, wherein Arg is substituted for Lys.

34. (New) The peptide of Claim 28, wherein Glu is substituted for Asp.

35. (New) The peptide of Claim 28, wherein Asp is substituted for Glu.

36. (New) The peptide of Claim 28, wherein Ser is substituted for Thr.

37. (New) The peptide of Claim 28, wherein Gln is substituted for Asn.

38. (New) An isolated peptide which is a homologous peptide to SEQ ID NO.: 2, wherein said homologous peptide is encoded by a polynucleotide having at least 75% homology to SEQ ID NO.: 1 and wherein said homologous peptide induces SHC phosphorylation or induces the SHC/MAPK pathway.

39. (New) The peptide of Claim 38, wherein said homologous peptide is encoded by a polynucleotide having at least 80% homologous to SEQ ID NO.: 1.

40. (New) The peptide of Claim 38, wherein said homologous peptide is encoded by a polynucleotide having at least 90% homologous to SEQ ID NO.: 1.

41. (New) The peptide of Claim 38, wherein said homologous peptide is encoded by a polynucleotide having at least 95% homologous to SEQ ID NO.: 1.

42. (New) An isolated peptide having SEQ ID NO.: 4 or a homologous peptide, wherein said homologous peptide induces SHC phosphorylation or induces the SHC/MAPK pathway.

43. (New) The peptide of Claim 42, having SEQ ID NO.: 4.

44. (New) The peptide of Claim 42, wherein said homologous peptide contains one or more conservative mutation.

45. (New) The peptide of Claim 42, wherein said conservative mutation is a replacement of one or more non-polar R-groups by other non-polar R groups.

46. (New) The peptide of Claim 42, wherein said conservative mutation is a replacement of one or more uncharged polar R groups by other uncharged polar R groups.

47. (New) The peptide of Claim 42, wherein said conservative mutation is a replacement of one or more charged polar R groups by other charged polar R groups .

48. (New) The peptide of Claim 42, wherein Lys is substituted for Arg.

49. (New) The peptide of Claim 42, wherein Arg is substituted for Lys.

50. (New) The peptide of Claim 42, wherein Glu is substituted for Asp.

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cont.

51. (New) The peptide of Claim 42, wherein Asp is substituted for Glu.
52. (New) The peptide of Claim 28, wherein Ser is substituted for Thr.
53. (New) The peptide of Claim 42, wherein Gln is substituted for Asn.
54. (New) An isolated peptide which is a homologous peptide to SEQ ID NO.: 4, wherein said homologous peptide is encoded by a polynucleotide having at least 75% homology to SEQ ID NO.: 3 and wherein said homologous peptide induces SHC phosphorylation or induces the SHC/MAPK pathway.
55. (New) The peptide of Claim 54, wherein said homologous peptide is encoded by a polynucleotide having at least 80% homologous to SEQ ID NO.: 3.
56. (New) The peptide of Claim 54, wherein said homologous peptide is encoded by a polynucleotide having at least 90% homologous to SEQ ID NO.: 3.
57. (New) The peptide of Claim 54, wherein said homologous peptide is encoded by a polynucleotide having at least 95% homologous to SEQ ID NO.: 3.

BASIS FOR THE AMENDMENT

Claims 16-25 have been canceled.

Claim 5 has been amended.

Claims 26-57 have been added.

The amendment of Claim 5 is supported by Claim 5 as originally filed. New Claims 26-57 are supported by original Claims 16-25 and page 7, line 15 to page 32, line 7.

No new matter is believed to have been added by the present amendment.